

Green Line Committee 2020 June 1

GREEN LINE BACKGROUND

Planning for elements of the Green Line LRT started back as far as 1967. In recent years significant planning studies have been completed which have shaped the alignment, including:

- 2012 Southeast LRT Functional Planning Study 1
- 2012 North Central LRT Corridor Planning Study
- 2015 Green Line SE Alignment and Station Location Report
- 2017 Green Line LRT Alignment and Stations 160 Avenue to Seton

As the Green Line advanced through the various levels of planning, there has been a high level of collaboration across The City business units with portions of this work being reviewed by a variety of Standing Policy Committees (SPC) including: SPC on Transportation and Transit, SPC on Planning and Urban Development and SPC on Community and Protective Services. In the fall of 2019 City Council created the Green Line Committee to consolidate all reporting and increase due diligence.

Four Layer Planning Approach

The Green Line team developed and implemented a unique, four-layered planning and engagement process that served as the foundation for the holistic planning approach to the Green Line program. This approach involved collaboration and engagement across all City departments and extensive engagement with external partners, industry and the public. The goal was to ensure that other City programs and future opportunities were considered and incorporated where feasible or allowances made for later additions where possible. i.e. stations will have the capability to accept event programming such as live entertainment, pop-up markets and community events.

The four layers are:

- Transit Infrastructure;
- Connections to stations;
- Transit Oriented Design (TOD) supportive infrastructure; and
- City Shaping connections to services and local and regional destinations.

More than any other City project, the determination of the alignment and stations were influenced by an integrated approach to transportation, land use planning, city shaping objectives, and public engagement. The approach was taken to plan for and consider all future needs to minimize costly retrofits and changes later.

Public engagement has been ongoing since the development of the early functional studies for both the north and southeast segment of the corridor. Since the Green Line LRT was formalized as a single program at the end of 2015, ongoing engagement has included the development industry, Community Associations, City wide business units, and the public. Input from all stakeholders has been critical to developing recommendations regarding alignment and station locations, identifying connections to and from Green Line stations, the ongoing development of

land use planning concept, and city shaping principles. The amount of public engagement has surpassed any other project ever undertaken by The City.

Current funding for the Green Line LRT will enable the implementation of Layer 1 (transit infrastructure) and essential components of Layer 2 (connections to transit stations). Future project developments and partnerships with key stakeholders are anticipated to deliver the remaining layers. Together, all four layers will support the creation and evolution of well-planned, connected, accessible, affordable, and vibrant communities that support the use of transit in the community.

Layer One – Transit Infrastructure

The approved alignment and stations balance community priorities, are supportable by the stakeholders, align with City objectives, and demonstrate the vision that the Green Line LRT is more than a transit line; it is a city shaping opportunity. Other layer one infrastructure such as Bus Terminals, Park and Rides, Maintenance and Storage Facilities (MSF) and low-floor light rail vehicles have been designed to prioritize customer experience, ensure operational efficiencies and accessibility needs.

Layer Two – Connections to Stations

Layer two connections to stations have been prioritized to provide critical connections where there is missing or unsafe infrastructure that inhibits pedestrian access within a 10-minute walk to station areas. These connections enable citizens to safely and conveniently access Green Line's stations starting from opening day. Specific consideration has been given to those components that are critical to build with Green Line infrastructure. An example of this is the multi-use pathway connection that will be constructed as part of the south Bow River bridge crossing near 46 Avenue S.E. Other considerations include planning support for the provision of robust alternative transportation means such as various bike share, car share, micro-mobility (e-scooter), and pick-up/drop-off models of use.

Layer Three – Transit Oriented Design (TOD)

The third layer, TOD, was integrated with the early functional engineering process to ensure that the right framework is in place to realize TOD opportunities. Early initiatives, such as a 30-year market study, establishment of a developer advisory group and extensive community-informed station area design charrettes, helped inform where, how and what TOD was possible along the Green Line. More recent work, such as the city-wide TOD Implementation Strategy and the establishment of a corporate TOD program under Urban Initiatives, will continue to advance the City's commitment to the success of future TOD. Council approved The City's Transit-Oriented Development Implementation Strategy - Final Report (PUD2019-1515) at the December 4, SPC on Planning and Urban Development.

Layer Four – City Shaping

"City Shaping" is about leveraging Calgary's investment in transit infrastructure to strengthen and support the social needs of communities along the Green Line. It is about investing in people, places and programs that are near high quality transit service, making it easy and convenient for Calgarians to connect to them. Fulfilling the full potential of City Shaping will be a long-term process that extends beyond the delivery of the Green Line project and will require collaborative efforts by the Corporation and external partners. The current focus by the City Shaping team is to ensure infrastructure

built as part of the LRT project is done to maximize future City Shaping success. Inputs that prioritize a people-first approach focused on pedestrian experience and human comfort have been provided to support the development of quality public realm and urban design.

The Green Line program has been designed to best utilize The City's assets to create value for Calgarians both living near the line and throughout the city. The program team will continue to ensure that the design and delivery of Green Line provides high quality mobility and fits into and enhances the local communities it serves.

Since 2017, Administration has been advancing the planning and design of the LRT alignment for Stage 1 (16 Avenue N – 126 Avenue S), acquiring the required real estate, preparing land for construction through an enabling works construction program and preparing procurement documents for various aspects of the program.

The culmination of this work was presented to Council in the Green Line LRT long-term vision at the 2017 June 26 Regular Meeting of Council, Report TT2017-0534 (Green Line LRT Alignment and Stations 160 Avenue N to Seton), which was a holistic guide for future investments intended to transform communities along the Green Line LRT corridor considering people, places, and programs that are connected by reliable transit. Approval of the Green Line Functional study in 2017 completed the visioning and planning phase of Segment 1 of the Green Line project, whereby the alignment and stations were set, the necessary connections to stations were identified, high-level TOD concepts were completed, and the framework for city shaping implementation was approved.

Identification of Stage 1 as the Priority Project

The portion of the alignment extending from 16 Avenue N to 126 Avenue S.E. (Shepard) was approved by Council at the 2017 June 26 Combined meeting of Council, Report TT2017-0534 (Green Line LRT Alignment and Stations 160 Avenue N to Seton), to become Stage 1 of the Green Line program because of its ease of expandability, existing and planned transit network connections, projected opening day and future ridership and overall project readiness report (advanced stage of land acquisition, high support from the communities and design furthest along with the alignment and station locations).

Stage 1 is the most complex and expensive portion of the Green Line project and will complete the core foundation of the Green Line, enabling future expansion to both the north and south. Future expansions, much as in the case of the Red and Blue Lines, will be built in incremental stages as funding becomes available. Once complete, the Green Line will be a 46 kilometre light rail transit (LRT) line connecting 27 communities and is projected to serve over 200,000 trips daily.

July 2019 Direction to Revisit Stage 1 Alignment

In July 2019, Administration advised Council of the need to re-evaluate the scope of Stage 1 to bring the project cost estimates within budget, manage construction risk and improve customer experience. This re-evaluation explored opportunities across Stage 1. Prior to developing a revised recommendation, the Green Line Program Team started with reconfirming the Program Vision and outcomes. On 2020 January 13, City Council reconfirmed the Vision for the Green Line project as:

A city-shaping transit service that improves mobility in communities in north and southeast Calgary, connecting people and places and enhancing the quality of life in the city.

At the same meeting Council approved the following Outcomes for Calgarians which the Green Line project will deliver:

A transit service that:

- Improves mobility by providing a frequent, reliable, and affordable service.
- Contributes to an efficient transportation network that promotes transportation choice and reduces congestion, travel times and greenhouse gases.
- Enhances connectivity between people and places including connections to the broader transit network.
- Creates a positive transportation experience – safe, accessible, comfortable and convenient.
- Contributes positively to urban realm, community development and revitalization.
- Contributes to the vitality of business in the community.
- Protects the environment by enhancing City's environmental stewardship.